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PATENT**REMARKS**

Applicant has considered the Office Action of June 17, 2004. Applicant thanks the Examiner for allowing claim 29. Applicant respectfully requests allowance of claims 1-28 and newly added claims 30-33 in light of the amendments and following remarks.

**Comments on Statement of Reasons for Allowance**

The Examiner allows claim 29 based on the limitation of a third transceiver receiving on the reference frequency the message transmitted by the one intermediate node and transmitting on the reference frequency an implicit and/or explicit acknowledgment to the one intermediate node that the message has been received by the destination node; and the third controller controlling the operation of the third transceiver to receive the message transmitted by the one intermediate node and to transmit an implicit and/or explicit acknowledgment that the message had been received by the destination node. Applicant submits that there are other distinctions. For example, another distinction over the prior art is the use of the reference frequency for both transmitting and receiving. This permits systems according to the invention to handle shorter, small messages via less expensive transceivers, and permits the use of on/off keying of the reference frequency rather than an entire band of frequencies.

**Comments on 35 USC § 102(e) and 35 USC § 103(a) Rejections**

Claims 1-8, 10-19, 21-22, and 24-28 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sherman (U.S. Patent No. 5,974,236). Applicant submits, however,

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that Sherman fails to teach each and every aspect of the claimed invention.

Sherman discloses an ad hoc network wherein nodes communicate with one another without the use of a network backbone or hierarchy. Sherman assumes that the output power of each node's transceiver may vary in frequency within a system. See Sherman at Col. 2, lines 19-29 and Col. 3, lines 48-57. In contrast, the present invention operates on only one frequency within a system. See application page 16, lines 3-12. To this end, amended claims 1, 11, and 26 recite, in part, receiving and transmitting employing "on/off keying of a reference frequency continuous waveform". Applicant submits that Sherman fails to disclose the use of a single reference frequency throughout the system to transmit or receive a keyed message. Applicants therefore believe amended claims 1, 11, and 26 to be allowable over the cited reference because it fails to teach each and every aspect of the claimed invention.

Claims 2-10 depend from claim 1 and are therefore allowable for at least the same reasons as claim 1.

Claims 12-25 depend from claim 11 and are therefore allowable for at least the same reasons as claim 11.

Claim 26 is allowable for additional reasons. Sherman discloses a dynamically reconfigurable communications network in which messages are passed from node to node. The header of a message as disclosed by Sherman contains a list of node identifiers designating all of the nodes that are supposed to hand off the message. When a node receives a message, it checks to see if its identifier is in the list. If it is, then it transmits the message. In this

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way, it propagates through the network to the final node on the list. See Sherman Col. 5, line 58 to Col. 6, line 5. In contrast, in one form, the message header of the present invention has four node identifiers in it. For example, it has the origination node identifier, the destination node identifier, the identifier of the node actually transmitting the message, and the identifier of the node intended to receive the message. See application page 37, lines 1-4. To this end, amended claim 26 recites, in part, "transmitting bits identifying the current node transmitting the message", and "receiving bits identifying the next node intended to receive the message currently being transmitted". Applicant respectfully submits that Sherman fails to disclose a keyed message having transmitting bits that identify the node actually transmitting the message, and receiving bits designating the next intended recipient of the message. Applicant therefore believes claim 26 to be allowable over the cited reference because it fails to teach each and every aspect of the claimed invention.

Claims 27-28 depend from claim 26 and are therefore allowable for at least the same reasons as claim 26.

Claims 9, 20, and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Sherman in view of Ayanoglu et al "Ayanoglu" (U.S. Patent No. 5,822,309). Applicants submit that claims 9 and 20 depend from amended claims that are allowable and are therefore allowable for at least the same reasons.

Claim 23 has been rewritten in independent form. Sherman does not contemplate the significance of the transmitting power of the transceiver. Ayanoglu only

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contemplates the significance of the transmission power with reference to a beacon emitted by the portable broadcast station (PBS), not with respect to any data communications of the nodes. See Ayanoglu Col. 9, line 63 to Col. 10, line 5. In contrast, the present invention recognizes the need to be able to adjust the power output of the transceiver. In an area densely populated with transceivers transmitting on the reference frequency, reducing the transmission power of the transceivers reduces interference between them and yields an effective increase in bandwidth because more transceivers are able to communicate at the same time. The present invention also recognizes the need to transmit using more power in a less densely populated area. To this end, amended claim 23 recites, in part, "each transceiver has an adjustable power output which varies as a function of the number of nodes responding thereto thereby reducing interference between adjacent transceivers and thereby increasing the effective bandwidth of the system." Applicant submits that Ayanoglu and Sherman fail to teach or contemplate transceivers having such an adjustable power output. Applicant therefore believes amended claim 23 to be allowable over the cited references because they fail to teach each and every aspect of the claimed invention.

The title is objected to as not being descriptive and the Examiner requests a new title that is clearly indicative of the invention to which the claims are directed. Applicant respectfully requests that the title, "Wireless Transceiver Network Employing Node to Node Messaging" be replaced with the new title, "On/Off Keying,"

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Routing and Configuring".

Claims 30-33 have been added. Claims 30-32 depend from claim 29 and are allowable for at least the same reasons. Claim 33 presents subject matter corresponding to claims 1 and 23 and is allowable for at least similar reasons.

For at least the reasons noted above, Applicant respectfully submits that claims 1-33 are in condition for allowance and that the application is now in condition for allowance. If the Examiner feels, for any reason, that a personal interview will expedite the prosecution of this application, he is invited to telephone the undersigned.

Applicant does not believe that a fee is due in connection with this response. If, however, the Commissioner determines that a fee is due, he is authorized to charge Deposit Account No. 19-1345.

Respectfully submitted,



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